

SEPT 1984⁷

EXECUTIVE SUMMARY

Mine Name: Vernal Phosphate Operations
 Operator: Chevron Resources Company
Manila Star Route
Vernal, Utah 84078
 Telephone: (801) 789-2233
 Contact Person: LeRoy Fyock
 Life of Mine: 50 Years
 Legal Description: Sections 19, 21, 22, 23, 27, 28 & 29
Townships 2 & 3 South, Ranges 21 and 22 East
 Mineral(s) to be Mined: Phosphate ore (apatite)
 Mining Methods: Surface Mine
 Acres to be Disturbed: 1,505 (75 - 255 at any one time)
 Present Land Use: Wildlife, Grazing and Mining
 Postmining Land Use: Wildlife, Grazing
 Variances from Reclamation Standards (Rule M-10) Granted: None

Soils and Geology:

Soil Description: Gravelly loam-loam, moderately to strongly alkaline, well drained soil formed from residum and coluvium from sedimentary and metamorphic rock.
 pH: 6.6-8.5
 Special Handling Problems: High erosion hazard.
 Geology Description: The Meade Peak member (phosphatic shale beds) of the Park City formation are exposed on the southern flank of the Uintah Mountains. The Weber Sandstone underlies the ore zone while the Franson Limestone lies above.

Hydrology:

Ground Water Description: The water table lies below the mining zone in the Weber Sandstone. Wells are monitored semi-annually with no impact being detected to date.
 Surface Water Description: All disturbed area runoff is directed via hydrologic structures into the tailings pond; settling basins are employed locally to control runoff from roads and from areas of active mining.
 Water Monitoring Plan: Surface water samples are collected quarterly from 12 sites and groundwater is sampled semi-annually from 6 monitoring wells. An annual report will be supplied to the Division.

Ecology:

Vegetation Type(s); Dominant Species: Juniper, Sage, Ricegrass and Sweetvetch
 Percent Surrounding Vegetative Cover: 18 percent
 Wildlife Concerns: Critical deer winter range impact mitigated by transplanting shrubs to provide escape cover, and planting of species palatable to wildlife.
 Surface Facilities: Conveyors, crushers, pipeline to concentrator plant, classified tailings pond, filter, dryer, storage teepee and loadout. Pipeline construction is commencing.
 Mining and Reclamation Plan Summary: See attachment II

Surety:

Amount: \$1,000,000 currently held with an additional \$2,000,000 to be provided to cover expansion.
 Form: Cash
 Renewable Term: Annual
 00950

ATTACHMENT 2

MINING AND RECLAMATION PLAN SUMMARY

During Operations:

1. Surface mining of Panel D will necessitate prior soil stripping according to maps prepared from site specific soils data. Soil will either be used in contemporaneous reclamation efforts or placed in short-term stockpiles awaiting use.
2. Revegetation and stabilization efforts will occur as near as practical to an area being mined out. Additionally, Chevron Resources has made a practice of reclaiming the "backlog" of unreclaimed disturbance from the previous operator.
3. Water quality is maintained by the use of french drains through which runoff from the disturbed area is routed. Sediment settles out as water passes over the coarse materials of the french drain owing to decreased velocities.

Runoff from the access roads is diverted by berms to basins where it is collected and evaporated to prevent sediment from leaving the immediate area. Sampling of local springs and of the french drain outlets are taken regularly.

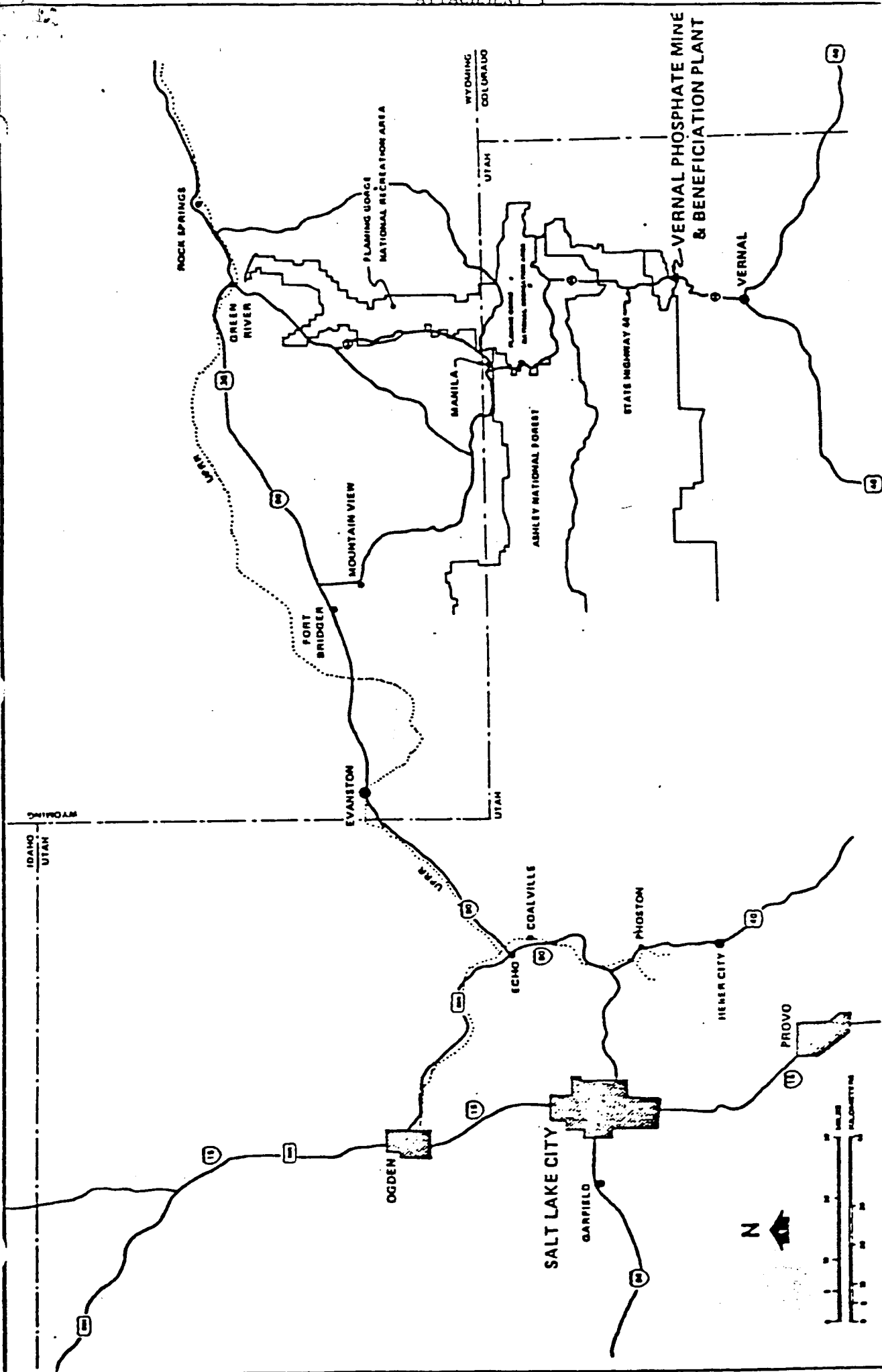
4. The Utah Division of Wildlife Resources (UDWR) has previously determined that the impact to wildlife migration is substantially mitigated by the cover adjacent to active operational areas. Further, UDWR is not aware of any impacts to the fisheries in Brush Creek or Red Fleet Reservoir. Transplanting will occur in certain areas to provide escape cover for wildlife.
5. Public safety will be enhanced by warning signs: the highway crossing will be fenced and well monitored; proper blasting procedures will be employed; and chemical analysis of overburden and tailings has revealed no problem concentration of any potentially toxic elements.

After Operations:

1. All extraneous debris will be disposed of according to a current permit from the Department of Health or otherwise disposed of in an approved manner.

2. Final grading will be done to approximate the original contour as closely as possible and to provide the most stable surface. Inclined terraces will be put in place to enhance stability and infiltration while decreasing runoff velocities.
3. All mined areas will be topsoiled and reseeded with species conducive to wildlife and livestock.

Any person or agency aggrieved by this tentative decision is hereby requested to submit written protest within thirty (30) days of the date of publication to the Division of Oil, Gas and Mining, 4241 State Office Building, Salt Lake City, Utah 84114, setting forth factual reasons for his or her complaint, and thereafter, at a time and place to be established, appear before the Board of Oil, Gas and Mining to show cause, if any, why this mine plan revision should not be approved.



LOCATION MAP
VERNAL PHOSPHATE PROJECT
CHIEVION RESOURCES COMPANY